

REMARKS

The drawings are objected to because they do not show every feature of the invention specified in the claims.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter namely the phrase "except for unintended frictional effects, exclusively" in claims 2 and 14.

Claims 2, 4, 6, 8, 10, 12 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Claims 2, 4, 6, 8, 10, 12 and 14 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, 1st paragraph, set forth in this Office Action.

Regarding the drawing objections, contrary to the Examiner's position, the Drawings currently and have since the initial disclosure supported the limitations of exclusive compression/expansion. Figure 1, 2 illustrate hydraulic shock absorber 100 with compression damping means 101. Figure 4, 5 illustrate hydraulic shock absorber 200 with expansion damping means 201.

The Examiner cites two references for the proposition that a check valve can be used as a damping valve.

The Pierce check valve is purposely arranged with a gap between the check valve disc outer radial edge and the wall of the central section of the bore, to allow the damping fluid to pass through this small gap to provide damping during the "closed" state of the valve. This valve

is specifically designed to never completely block the flow of fluid in one direction, in order to allow flow in the closed position, to satisfy specific objects of that invention, such as reducing the sensitivity of the height control valve assembly. This is not the function of a typical check valve, and is not the function of the present valve, which blocks flow and provides no damping in the closed position.

Similarly, Foster describes a valve which is arranged to slightly open even in the closed position, in order to purposely allow the flow of fluid through gaps between the plate and the cylinder, and create a damping effect even when in the "closed" position. This again is not analogous to the typical check valve of the present invention.

These valves are not typical check valves, according to the commonly understood meaning of that term. They are specially modified valves.

The Examiner again mistakenly refers to damping valve 43 of the present invention as a check valve. The original disclosure [0031] clearly refers to "compression side damping valve 43." The possible reason for the mistaken understanding is addressed in the remarks section of the previous Response.

Element 44 is a check valve, and element 43 is a damping valve.

The Examiner continues to consider that check valve 44 is a damping valve. She cites the Pierce and Foster references as support for check valves which provide damping. It has been explained above why those references are distinguished from the typical check valves in the present invention.

Once again, it is asserted that it is not appropriate to cite specific patent documents for the definition of general engineering terms, particularly when those documents reflect the freedom of an inventor to be his or her own lexicographer when it comes to defining the elements of their invention to suit their inventive needs. The cited documents are both examples of cases where the particular inventor required that the "check valve" doesn't completely "check" the flow in the closed direction but instead are designed to allow leakage in the closed position to achieve a specific damping effect directly related to the specific purposes of their invention.

The standard general definition of a check valve is a device which normally allows fluid to flow through in only one direction (Wikipedia—check valve).

Toilet valves that allow the toilet to run continuously after flushing are check valves that have failed in their function as a check valve.

Heart valves that do not close the back flow of blood are defective check valves that are often replaced.

The check valve 44 of the present invention is arranged to close entirely during the compression stroke of the compression side damping force generating means 101, in order to force the damping fluid to flow through the compression side damping valve 43 to provide damping force during the compression stroke. The check valve 44 opens during the expansion stroke of the shock absorber 100 in order to allow the shock absorber to expand as freely as possible. That is the basic point of this invention. One shock absorber damps during compression and the other damps during expansion. There is no disclosure which suggests sharing of those functions, and in fact the entire disclosure is aimed at the exact opposite of a shared damping responsibility.

If the inventor had intended that valve 44 should act as a damping valve, he would have called it a damping valve. Instead, he purposely called it a "check valve", contrasted with the previously called out "damping valve."

The inclusion of the description "except for unintentional frictional effects, due to non-ideal components, exclusively during (compression/expansion)" is not new matter. These words are simply a clarification that the term "check valve" in the present invention is to be interpreted in the standard manner, that is, a valve which is intended to the extent physically possible in the real world of unintended frictional effects to allow unrestricted flow in one direction, and to entirely prevent flow in the other direction. This is the normal meaning of the term "check valve," absent a special inventive reason to have a modification of the standard function of a check valve, at which time the modification of the function need be called out by the inventor/lexicographer.

It is a somewhat abstract hypothetical question as to whether all check valves are really damping valves because in the real world they can never absolutely block/allow fluid flow down to the last molecule. Similarly, the question may then also be posed as to whether all resistors are actually wires because current can flow through them, or are all wires actually resistors because they exhibit non-zero resistance.

At a point, engineering terms in a patent document should be interpreted according to their intended meaning. The purpose of the claim terms are to identify the area which belongs to the inventor. Here, the inventor intends the check valve to block flow in the one direction, and to allow free flow in the other direction. He employs and calls out a damping valve to damp, and a check valve to block and in fact redirect the flow to that damping valve when damping is desired.

It is asserted that there is absolutely no teaching in the present disclosure that the check valves act as damping valves. It is further asserted that the additional description of the non-idealized flow characteristics is not new matter, but is instead simply a clarification of the intended plain meaning of the original terms, and is therefore a somewhat redundant restriction of those terms to their original scope, as they are intended to be understood.

The drawings likewise cannot be held to describe the check valves as instead being damping valves, in part because no inference can be properly drawn from a view of the size of the flow passages shown in the drawing figures, remembering that patent drawings are intended to be illustrative of the structure, and are not necessarily to scale regarding a working model of the invention. Further, any perceived restriction to the flow through any visually apparent passage in a drawing figure is also dependent on many other factors, such as temperature, viscosity, and pressures of the fluid, surface of the passage, and other variables. The resistance through an illustrated passage in a patent document cannot properly be determined without reference to the written description of that passage or element, because the inventor has the right to specify the characteristics as suits his inventive concept.

Contrary to the Examiner's assertions, there are no illustrations or sections of the specification supporting non-exclusive compression/expansion damping. The Examiner is reading into the specification characteristics which the Inventor has specifically excluded by his description of the two different damping force generating means, and via the distinguished terms "damping valve" and "check valve."

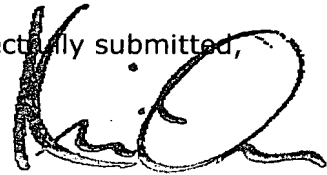
CONCLUSION

Applicant asserts that all of the objections have been obviated, and now respectfully requests withdrawal of those objections and an allowance of this application.

PETITION FOR AN EXTENSION OF THE TERM

Applicant hereby petitions for a one-month extension of the term for reply from 3 December 2008 to 3 January 2009. Submitted herewith is a check for \$130 to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to Deposit Account Number 04-2219, referencing our Docket Number 13712.

Respectfully submitted,

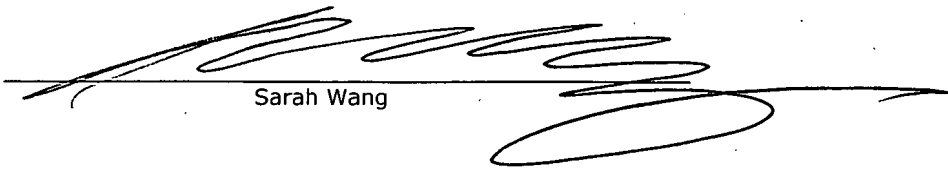


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I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Alexandria, VA 22313-1450, on 5 January 2009.



Sarah Wang